

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions and listings of claims in the application:

1. (Currently Amended) An apparatus for analyzing biochemical reaction using a substrate having a reaction area for performing the biochemical reaction and an electrode formed in the reaction area, the apparatus comprising:

means for holding the substrate;

an external electrode disposed opposite to the electrode of the substrate, the external electrode having a probe shape comprising a metal free end and a semiconductor wafer formed on the metal free end, the semiconductor wafer having a mirror finished surface facing the substrate; and

electric field controlling means for generating an electric field between the electrode of the substrate and the external electrode.

2. (Original) The apparatus according to claim 1, wherein:

the electrode of the substrate is a conductive layer formed as an underlying layer of the reaction area; and

the external electrode has a plane parallel to the conductive layer.

3. (Previously Presented) The apparatus according to claim 1, wherein the electric field controlling means generates an AC electric field between the electrode of the substrate and the external electrode.